37 are supported by the claims and specification as originally filed, and no new matter has been added.

As required by 37 C.F.R. § 1.121(c)(1)(ii), Applicants have provided a marked-up version of the amended claims in the attached Appendix.

### III. Rejections Under 35 U.S.C. § 103

The Examiner has maintained under U.S.C. § 103(a) the rejection of claims 1-23, 27, 28, 33, 35 and 37 as being unpatentable over U.S. Patent No. 5,449,519 to Wolf et al. ("Wolf") in view of U.S. Patent No. 5,679,374 to Fanchon et al. ("Fanchon"), and the rejection of claims 24-26 as being unpatentable over Wolf in view of Fanchon, and further in view of U.S. Patent No. 5,569,651 to Garrison et al. ("Garrison") for the reasons set forth at page 2-3 of the final Office Action dated April 10, 2002. Applicants continue to disagree with these rejections for reasons of record, as well as those set forth below.

## A. There is no concrete evidence to support the Examiner's continued assertion of obviousness.

As discussed in the After-Final Response dated July 10, 2002, at pages 2-3, the Federal Circuit requires that the record contain "substantial evidence" to support the Examiner's determinations of prima facie obviousness. *See In re Zurko*, 258 F.3d 1379, 1386, 59 U.S.P.Q.2d 1693, 1697 (Fed. Cir. 2001). Specifically, unless "substantial evidence" found in the record supports the factual determinations central to the issue of patentability, the rejection is improper and should be withdrawn. *See Zurko*, 258 F.3d at 1386. In *Zurko*, the Federal Circuit specifically rejected the Office's reliance on "basic

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<sup>1300</sup> l Street, NW Washington, DC 20005 202.408.4000 Fax 202.408.4400 www.finnegan.com

Applicants note that claim 34 has not been rejected by the Examiner. Accordingly, Applicants request that the Examiner clarify the rejection or indicate that claim 34 contains allowable subject matter.

knowledge" and "common sense" to support an obviousness determination when the "assessment of basic knowledge and common sense was not based on any evidence in the record and, therefore, lacks substantial evidence support." *Id.* at 1385. Instead, the Federal Circuit requires "some concrete evidence in the record in support of these findings." *Id.* at 1386.

Based on the disclosure of the prior art, there is no concrete evidence that supports the Examiner's motivation for combining the references. For instance, the invention of Wolf relates to compositions comprising a carrier molecule that <u>must</u> include a chemically bonded anti-acne active. *See* col. 1, line 56 - col. 2, line 21. The carrier molecule can include, *inter alia*, a synthetic polymer, such as branched (or dendritic) polyamidoamines. *Id.* at col. 2, lines 53-62 and col. 3, line 39 - col. 4, line 10. The reference, however, not only lacks the specific requirement of the polyalkylenepolyamines of the claimed composition, but there is also no discussion or requirement of polyamidoamines without a chemically bonded anti-acne active. Thus, Wolf fails to suggest the presently claimed polyalkylenepolyamines. *See* amended claim 1. Wolf also broadly mentions that the compositions may contain a pigment (col. 4, lines 58), but hardly suggests or requires "the at least one nanopigment" of the claimed invention. *See* amended claim 1.

Moreover, neither Fanchon nor Garrison cure the overwhelming deficiencies of Wolf. Specifically, Fanchon only briefly teaches that pigments and nanopigments are known in the art, without providing any suggestion for choosing nanopigments over pigments. See After-Final Response dated July 10, 2002, page 4 at lines 3-13. Even more importantly, however, both Fanchon and Garrison are silent with respect to the

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polyalkylenepolyamines polymers of the present invention. *Id.* at lines 13-16; see also Amendment filed October 16, 2001, at page 6, lines 15-16.

Thus, there is no evidence, much less any concrete evidence, that supports the Examiner's conclusory statement that a motivation to combine the references exists. See In re Sang-Su Lee, 61 U.S.P.Q.2d 1430, 277 F.3d 1338, 1343 (Fed. Cir. 2002) (indicating that conclusory statements by the Examiner were not adequate to address the issue of motivation to combine the references). Accordingly, the rejection should be withdrawn on this basis alone.

### B. An "obvious to try" rationale is not the standard for determining obviousness.

The Federal Circuit has made it clear that a rejection under section 103 cannot rely on an argument that "presents, in essence, an 'obvious to experiment' standard for obviousness." *In re Dow Chemical Co. v. American Cyanamid Co.,* 5 U.S.P.Q.2d 1529, 1532 (Fed. Cir. 1988) Rather, such a standard "would not only be contrary to statute but result in a marked deterioration of the entire patent system..." *In re Thomlinson*, 150 U.S.P.Q. 623, 626 (C.C.P.A. 1966).

The Federal Circuit has given some examples of what would constitute an "obvious to experiment" or "obvious to try" modification based on the prior art. See *In re O'Farrell*, 7 U.S.P.Q.2d 673 (Fed. Cir. 1988). "In some cases, what would have been 'obvious to try' would have been to vary all parameters or try each of numerous possible choices until one possibly arrived at a successful result, where the prior art gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful. In others, what was 'obvious to try' was to explore a new technology or general approach that seemed to be a promising field of

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experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it." *Id.* at 903, 7 U.S.P.Q.2d at 1681 (citations omitted) (emphasis added).

In spite of the overwhelming differences between the claimed invention and the combined prior art, it appears that the Examiner's rationale for the rejections of record is based on the shared commonality of the inventions of Wolf, Fanchon, and Garrison, *i.e.*, all disclose anti-acne compositions. For instance, the Examiner has asserted that both Wolf and Fanchon are anti-acne compositions and "[t]hus, the beneficial effect of nanopigments as protective agents in Fanchon et al. would be known to one of ordinary skill in the art." See Final Office Action dated April 10, 2002 at page 2. Applicants respectfully disagree.

At best, the disclosure of Wolf only provides general guidance for using pigments in its compositions. Wolf, however, provides neither the parameters nor the direction on how to formulate or use nanopigments its compositions, let alone nanopigments in combination with the polyalkylenepolyamines of the claimed invention. See amended claim 1. Moreover, with regard to the numerous polyamino polymers disclosed by Wolf, there is no indication nor any direction from the many possible choices that polyalkylenepolyamines would be successful, particularly any that would not be chemically bonded with an anti-acne active for the invention. Further, with respect to antioxidants, as required by instant claim 37, Wolf is also completely silent with regard to this disclosure. Fanchon, on the other hand, does mention antioxidants, but only offers very general guidance concerning its usage in anti-acne compositions. See, e.g., col. 2, line 34.

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP

Atty. Docket No.: 5725.0306-00

Thus, as the use of nanopigments, antioxidants, and the selection of polyalkylenepolyamines would be, at best, "obvious to try" or "obvious to experiment," in the claimed invention, the rejection is improper and should be withdrawn for this additional reason. Applicants therefore respectfully request withdrawal of these rejections.

#### **CONCLUSION**

In view of the foregoing amendment and remarks, Applicants respectfully request the reconsideration of this application and the timely allowance of the pending claims. Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Dated: November 12, 2002

ØBryaht L. Yŏung Reg. No. 49,073

FINNEGAN HENDERSON FARABOW GARRETT & DUNNERLLP

#### **APPENDIX**

# Version with markings to show changes made, pursuant to 37 C.F.R. § 1.121(c)(1)(ii)

#### **IN THE CLAIMS:**

Claims 1 and 37 have been amended as follows:

- 1. (Amended) A cosmetic and/or dermatological composition comprising, in a cosmetically and/or dermatologically acceptable support:
  - at least one nanopigment in said composition,
  - at least one polyamino polymer in said composition selected from:
  - (A) polyalkylenepolyamine polymers selected from:
  - (i) polyalkylenepolyamines;
  - (ii) alkyl derivatives of polyalkylenepolyamines;
  - (iii) addition products of alkylcarboxylic acids with polyalkylenepolyamines;
  - (iv) addition products of ketones and aldehydes with polyalkylenepolyamines;
  - (v) addition products of isocyanates and isothiocyanates with polyalkylenepolyamines;
  - (vi) addition products of alkylene oxide and polyalkylene oxide block polymers with polyalkylenepolyamines;
  - (vii) quaternized derivatives of polyalkylenepolyamines;
  - (viii) addition products of a silicone with polyalkylenepolyamines; and
  - (ix) copolymers of dicarboxylic acid and of polyalkylenepolyamines [;

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Atty. Docket No.: 09/083,150 Atty. Docket No.: 5725.0306-00

- (B) polyvinylimidazoles;
- (C) polyvinylpyridines;
- (D) addition products of 1-vinylimidazole monomers of formula (I):

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in which:

- radicals R independently represent H or a linear or cyclic, saturated or unsaturated C1-C6 alkyl radical,
  - n is an integer ranging from 1 to 3, with polyalkylenepolyamines (A)(i) to (A)(ix);
  - (E) amino acid polymers with a basic side chain; and
  - (F) crosslinked derivatives of polymers (A)(i) to (A)(ix), (B), (C), (D) and (E).
- 37. (Twice Amended) An antioxidant composition comprising at least one polyamino polymer in said composition selected from:
  - (A) polyalkylenepolyamine polymers selected from:
  - (i) polyalkylenepolyamines;
  - (ii) alkyl derivatives of polyalkylenepolyamines;
  - (iii) addition products of alkylcarboxylic acids with polyalkylenepolyamines;
  - (iv) addition products of ketones and aldehydes with polyalkylenepolyamines;
  - (v) addition products of isocyanates and isothiocyanates with polyalkylenepolyamines;

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Atty. Docket No.: 5725.0306-00

- (vi) addition products of alkylene oxide and polyalkylene oxide block polymers with polyalkylenepolyamines;
- (vii) quaternized derivatives of polyalkylenepolyamines;
- (viii) addition products of a silicone with polyalkylenepolyamines; and
- (ix) copolymers of dicarboxylic acid and polyalkylenepolyamines;
- (B) polyvinylimidazoles;
- (C) polyvinylpyridines;
- (D) addition products of 1-vinylimidazole monomers of formula (I):

$$\begin{array}{c|c}
 & R_n \\
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in which the radicals R independently represent H or a linear or cyclic, saturated or unsaturated  $C_1$ - $C_6$  alkyl radical,

n is an integer ranging from 1 to 3,

with polyalkylenepolyamines (A)(i) to (A)(ix);

- (E) amino acid polymers with a basic side chain; and
- (F) crosslinked derivatives of the polymers (A)(i) to (A)(ix), (B), (C), (D) and

(E);

wherein said polyamino polymer is present in an amount effective to inhibit lightinduced peroxidation of proteins, protein derivatives, and lipids.

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